

EXHIBIT A

Greg M. Podsakoff, M.D.
2832 Teal Drive
Fullerton CA 92835
Phone 714-996-5314

EDUCATION

1977, M.D. Loma Linda University School of Medicine. Comstock Award for Excellence in Internal Medicine and American Cancer Society Medical Student Award (1976).

1975, M.S. Microbiology, Loma Linda University.

1973, B.S. Biology, Loma Linda University.

PATENTS

- United States patent #5,858,351 January 12, 1999. Podsakoff et al: Methods for delivering DNA to muscle cells using recombinant adeno-associated virus vectors.
- United States patent #5,846,528 December 8, 1998. Podsakoff et al: Treating anemia using recombinant adeno-associated virus virions comprising an epo DNA sequence.

PROFESSIONAL EXPERIENCE/ TRAINING

7/99-present, Clinical Trial Coordinator, Gene Therapy, Division of Research Immunology/ Bone Marrow Transplantation, Childrens Hospital Los Angeles.

- Completed IND application for phase 1 study using retrovirus for the treatment of ADA deficient severe combined immune deficiency, submitted 8/26/99.

7/98- 7/99 (Consultant, Avigen, Inc.)

- Edited pre-clinical sections of phase I Investigational New Drug (IND) safety study proposing use of intramuscular AAV vector containing factor IX gene in patients with hemophilia B, filed 11/98.
- Advise on use of AAV vectors to treat anemia.

7/97-7/98 (Project Manager, Avigen, Inc.)

- Managed team writing up pre-IND and IND documents for Phase I Factor IX safety study.
- Represented Avigen at pre-IND meeting with FDA on February 12, 1998 regarding "Phase I Safety Study in Patients with Severe Hemophilia B Using AAV Vectors to Deliver the Gene for Human Factor IX to Skeletal Muscle."

5/ 95-6/97 (Research Scientist, Avigen, Inc.)

- Demonstrated that AAV vectors transduced skeletal muscle resulting in sustained therapeutic protein secretion.

1990-1995, postdoctoral fellowships, Pediatrics and Neurology, City of Hope Medical Center, Duarte, California. Investigated AAV vector-based transduction of nondividing cells and developed murine models of hematopoietic cell transduction (1992-1995). Developed herpes simplex viral vectors encoding antisense molecules (1990-1992).

1980-1989, private practice, internal medicine, Fresno, California. Retain active California medical license.

1977-1980, internal medicine internship and residency at the University of Texas Health Science Center at Dallas. Board certification internal medicine, 1980.

ORAL PRESENTATIONS

CORPORATE PRESENTATIONS / PRECLINICAL DATA.

Johnson & Johnson, New Jersey, 2/99.

Bayer, Berkeley, CA, 3/98.

Amgen, Thousand Oaks, CA, 8/97.

Recordati Farmaceutici, Milan, Italy, 4/97. Pharmacia, Milan, Italy, 4/97.

INVITED PRESENTATIONS, AAV VECTORS FOR GENE THERAPY (HEMATOPOIESIS AND CNS)

Johns Hopkins University Department of Pharmacology and Molecular Sciences, 2/98.

North America Medical Foundation (NORAM), Beijing Medical University, Beijing, China, 10/97.

Gordon Research Conference, "Red Cells," Tilton School, New Hampshire, 7/97.

Stanford University School of Medicine, Hematology Division Lecture, 6/97.

Graduate Student Course in Medicine, Jichi Medical School, Tochigi, Japan, 5/97.

The First International Adeno-Associated Virus (AAV) Vector Symposium, Tokyo, Japan, 5/97.

3rd Annual Meeting, Japanese Society of Gene Therapy, The University of Tokyo, Japan, 5/97.

American Society of Hematology, Nashville, TN, 12/94.

PUBLICATIONS

Brockstedt DG, GM Podsakoff, L Fong, G Kurtzman, W Mueller-Ruchholtz, and EG Engleman. 1999. Induction of immunity to antigens expressed by recombinant adeno-associated virus depends on the route of administration. Clin Immunol. 92:67-75.

Herzog RW, EY Yang, LB Couto, JN Hagstrom, D Elwell, PA Fields, M Burton, DA Bellinger, MS Read, KM Brinkhous, GM Podsakoff, TC Nichols, GJ Kurtzman and KA High. 1999. Long-term correction of canine hemophilia B by gene transfer of blood coagulation factor IX mediated by adeno-associated viral vector. *Nature Med.* 5:56-63.

Watson GL, JN Sayles, C Chen, SS Elliger, CA Elliger, NR Raju, GJ Kurtzman and GM Podsakoff. 1998. Treatment of lysosomal storage disease in MPS VII mice using a recombinant adeno-associated virus. *Gene Therapy.* 5:1642-1649.

Matsushita T, S Elliger, C Elliger, G Podsakoff, L Villareal, GJ Kurtzman, Y Iwaki and P Colosi. 1998. Adeno-associated virus vectors can be efficiently produced without helper virus. *Gene Therapy.* 5:938-945.

Podsakoff GM, LB Couto, RT Surosky, SA McQuiston, and GJ Kurtzman. 1997. Gene therapy strategies for the treatment of thalassemia using adeno-associated virus (AAV) vectors. *Int. J. Ped. Hem. Onc.* 4:41-51.

Malik P, SA McQuiston, X-J Yu, KA Pepper, WJ Krall, GM Podsakoff, GJ Kurtzman, and DB Kohn. 1997. Recombinant adeno-associated virus (rAAV) mediates a high level of gene transfer but less efficient integration in the K562 human hematopoietic cell line. *J. Virol.* 71:1776-1783.

Kessler PD, GM Podsakoff, X Chen, SA McQuiston, PC Colosi, LA Matelis, GJ Kurtzman, and BJ Byrne. 1996. Gene delivery to skeletal muscle results in sustained expression and systemic delivery of a therapeutic protein. *Proc. Natl. Acad. Sci. USA.* 93:14082-14087.

Fisher-Adams G, KK Wong, G Podsakoff, SJ Forman, and S Chatterjee. 1996. Integration of adeno-associated virus vectors in CD34+ human hematopoietic progenitor cells after transduction. *Blood.* 88:492-504.

Chatterjee S, D Lu, G Podsakoff and KK Wong, Jr. 1995. Strategies for efficient gene transfer into hematopoietic cells: The use of adeno-associated virus vectors in gene therapy. *Ann. N Y Acad. Sci.* 770: 79-90.

Podsakoff G, KK Wong, Jr. and S Chatterjee. 1994. Efficient gene transfer into non-dividing cells by adeno-associated virus (AAV)-based vectors. *J. Virol.* 68: 5656- 5666.

Cantin EM, G Podsakoff, D Willey, and H Openshaw. 1992. Antiviral effects of herpes simplex virus specific antisense nucleic acids. Innovations in Antiviral Development and the Detection of Virus Infections. American Society of Microbiology, Plenum Press.